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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,249	08/31/2006	Tetsuya Chikatsune	Q96751	8302

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER	
LAO, MARIALOUISA	

ART UNIT	PAPER NUMBER
1621	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/591,249	CHIKATSUNE ET AL.	
	Examiner	Art Unit	
	LOUISA LAO	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 3/3/08 have been fully considered, as follows:

a. priority is acknowledged via PTOL-326.

b. the correction to typographical errors in the specification is acknowledged.

c. the cancellation of claims 2-3 and the amendments of claims 1, 4-5 are acknowledged.

d. the rejection of claims 1 and 4-9 under 35 U.S.C. 103(a) but they are not persuasive. Thus the rejection is maintained, see below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. The rejection of claims 1 and 4-8 is maintained under 35 U.S.C. 103(a) as being unpatentable over Matsuoka Shinichi et al. (JP08-141386, JP'386) in view of Tatani Atsushi et al. (JP11128612, JP'612).

3. Applicants' claims are drawn to a method for extracting slurry by extracting slurry from an agitation vessel having a bottom face and a side wall and housing the slurry, characterized in that the slurry is extracted from an open end of a slurry extraction tube provided at the side wall of the agitation vessel in a direction toward the interior of the agitation vessel, wherein the open end of the slurry extraction tube protrudes from the side wall of the agitation vessel in a direction toward the interior of the agitation vessel; and, wherein the slurry flows in the agitation vessel, and a normal line direction of a surface of the open end of the slurry extraction tube is in a direction of an angle with respect to a downstream direction of a flow of the slurry of 0° or more and less than 90°. Said slurry is extracted through a decompression valve to a vessel under a pressure lower than the agitation vessel and using a pump.

4. JP'386 teaches a method of removing slurry by allowing slurry to flow into a removing pipe (3) provided at the bottom of a stirring tank, where said pipe has its inner opening end (4) projecting upward from the tank bottom (see purpose and figure). JP'386 teaches the use of a pump (5) in the figure. JP'386 teaches in claim 4 that the slurry is terephthalic acid in water or an acetic acid solution.

5. The difference between the instant claims and JP'386 is the location of the tube. In the instant claims, the extraction tube projects inwards from the side wall of the tank, while JP'286 has the removing tube projecting inwards from the bottom of the tank.

6. JP`612 is relied upon to show that a device was taught at the time of the invention, with a tube at a side wall of a tank enabling slurry in tank to flow out by head differential (see Solution). JP`612 teaches that the tube at the side wall is angled (see Figure).

7. The difference between the instant claims and the combination of the teachings of the cited prior art references would make the difference unpatentable. This difference would have been obvious, at the time of Applicants' invention was made, to one of ordinary skill in the art since this adaptation of one location of the extraction tube relative to another would have been within the technical grasp of the artisan, with a reasonable expectation that the extraction tube would have the utility intended. Further, the instant angles are obvious to one of ordinary skill in the art to provide the fluid turbulence expected in the motion of a fluid when encountering an obstacle, as in the instant extraction tube.

The claim would have been obvious because " a person of ordinary skill has a good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product, not of innovation, but of ordinary skill and common sense.

The Supreme Court in *KSR* noted that if the actual application of the technique had been beyond the skill of one of ordinary skill in the art, then the resulting invention would not have been obvious because one of ordinary skill could not have been expected to achieve it.

- Applicant acknowledges JP`386 teaches a "method of removing slurry to prevent pump operation from hindrance caused by allowing peeled-off matter to flow into a slurry removing pipe" and is located such that "the inner opening end of the removing pipe projects upward from the tank bottom and is set at a height up from the bottom of the stirring tank to prevent the peeled-off matter from coming into the removing pipe". Applicant then alleges that hindering materials of the instant claims and JP`386 are different.

However, JP`386 is drawn to a slurry that is terephthalic acid in water or an acetic solution. The instant claims do not reflect Applicants' allegation of a difference in materials.

- Applicants reiterate the "normal line direction of a surface of the open end of the slurry extraction is in a direction of an angle with respect to a downstream direction flow of the slurry of 0° or more and less than 90°", which Applicants

allege "prevents the solid content in the slurry precipitate from accumulating at the open end of the slurry extraction tube" because "of the agitation effect of the local eddy current" (Applicants, then, pointing to specification).

However, the secondary reference, JP`612 teaches a device was taught at the time of the invention, with a tube at a side wall of a tank enabling slurry in tank to flow out by head differential.

- Applicants then allege that with the device of JP`612 only liquid contents *[emphasis added by Applicants]* in a slurry can be drawn off.

However, albeit JP`612 is drawn to a draining device by which liquid contents of a slurry can be drawn off, JP`612 nonetheless teaches the configuration "with a tube at a side wall of a tank enabling slurry in tank to flow out by head differential", on which JP`386 is silent on.

8. The rejection of claims 1 and 4-9 is maintained under 35 U.S.C. 103(a) as being unpatentable over Matsuoka Shinichi et al. (JP08-141386, JP`386) in view of Tatani Atsushi et al. (JP11128612, JP`612) as applied to claims 1 and 4-8; and further in view of Katzschmann et al. (US3594414, US`414).

9. JP`386 in view of JP`612 for the rejection of claims 1 and 4-8 has been made of record above.

10. The instant claims have been discussed above. Said terephthalic acid is obtained through the hydrolysis of dimethyl terephthalate.

11. US`414 is relied upon to teach the production of terephthalic acid from the hydrolysis of dimethyl terephthalate (see column 1 lines 32-38).

12. One of ordinary skill in the art at the time of the invention would have found it obvious to utilize the method of extracting slurry of JP`386 and of JP`612 for the slurry of terephthalic acid made from the hydrolysis of dimethyl terephthalate of US '414, since the artisan of ordinary skill would have reached a reasonable expectation of success of extracting the terephthalic acid slurry with the methods of JP`386 in view of JP`612.

In applying known technique to a known device (method, or product) ready for improvement to yield predictable results, the claim would have been obvious because a particular known technique was recognized as part of the ordinary capabilities of one skilled in the art.

The Supreme Court in *KSR* noted that if the actual application of the technique had been beyond the skill of one of ordinary skill in the art, then the resulting invention would not have been obvious because one of ordinary skill could not have been expected to achieve it.

13. No claims are allowed.

- Applicants allege that JP'386 in view of JP'612 and further in view of US'414 do not teach, suggest or otherwise render obvious the present application, in light of the arguments that Applicants have presented above.

However, Applicants' arguments as responded to, as set forth above and included herein in their entirety, are *in toto*, unpersuasive. The rejection of the claims is maintained.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louisa Lao whose telephone number is (571)272-9930. The examiner can normally be reached on Mondays to Thursdays from 8:00am to 8:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Louisa Lao
Examiner
Art Unit 1621

/ROSALYND KEYS/

Primary Examiner, Art Unit 1621